DOCUMENT RESUME

ED 244 319 CS 504 615

AUTHOR Roberts, Charles; Pearson, Judy C.
TITLE Sex and Sex-Type: Factors in Predicting Success in the Communication Classroom.
PUB DATE Apr 84
NOTE 24p.; Paper presented at the Annual Meeting of the Southern Speech Communication Association (Baton Rouge, LA, April 5-7, 1984).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Androgyny; College Freshmen; Communication Research; Communication Skills; Females; *Grading; Higher Education; Males; *Predictor Variables; *Psychological Characteristics; *Self Concept; Sex Bias; *Sex Differences; *Speech Communication

ABSTRACT

A study examined the differential grading that occurs in basic speech communication classrooms and attempted to identify predictors for the differences in the grades that male and female students receive. Subjects were 47 women and 48 men randomly selected from an undergraduate speech course at a private midwestern college. Subjects' self-perceived levels of masculinity or femininity were determined using the Personal Attributes Questionnaire. Subjects' final course grades, ACT scores, and high school grade-point averages were obtained from college records. When the effects of classroom context (as measured by previous academic evaluation) and the ability or aptitude of the students (as measured by the ACT) were removed, sex differences in grading still remained. Biological sex, rather than perceived sex type, appeared to be the strongest predictor for discrimination in grading between men and women. Masculine and undifferentiated (low in masculine and feminine traits) women received the highest course grades, followed by androgynous (high in masculine and feminine traits) women, feminine women, feminine men, masculine men, undifferentiated men, and androgynous men. Several explanations that may account for the consistent indication that women receive higher grades in speech courses are discussed. Apart from psychological sex characteristics, covert neurological differences between men and women may be more important than overt anatomical differences in explaining and predicting successful communication. (HTH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ED244319

SEX AND SEX-TYPE: FACTORS IN PREDICTING SUCCESS IN THE COMMUNICATION CLASSROOM

Charles Roberts

Professor

McNeese State University

Lake Charles, Louisiana

and

Judy C. Pearson

Associate Professor

Ohio University

Athens, Ohio

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Charles V. Roberts

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CS 504 615

SEX AND SEX-TYPE: FACTORS IN PREDICTING SUCCESS IN THE COMMUNICATION CLASSROOM

Abstract

This study examines the differential grading that occurs in the basic speech communication classroom and attempts to identify predictors for the differences in the grades that male and female students receive. When the effects of the classroom context, as measured by previous academic evaluation, and the abilities or aptitudes of the students, as measured by standardized tests, are removed, sex differences still remain. Biological sex, rather than psychological sex type, appears to provide the most parsimonious explanation for discrimination in grading between men and women. Possible physiological explanations for this relationship are suggested.

Communication educators have demonstrated a continuing interest in the relationship between grading and gender in the basic speech communication course. Some of this concern arises from the possibility of bias and the need for objectivity in the classroom. Researchers have been interested in the interaction between the biological sex of the instructor and the biological sex of the student, the influence of the student's psychological sex type on his or her grades, and the sexist bias of the instructor affecting his or her grading patterns.

The student's gender appears to affect his or her evaluation in the basic course. Women receive higher ratings than do men on public speeches (cf. Barker, 1966; Pearson, 1980b); female speakers appear to receive more positive comments than do male speakers, even when grades are held constant (Sprague, 1971; Pearson, 1975); and female speakers obtain significantly higher scores on three dimensions of credibility--trustworthiness, competence, and dynamism--than do male speakers (Vigliano, 1974). Women receive higher grades in the basic speech communication course, regardless if the course is theoretical or performance-oriented (Pearson, 1982). Similarly, women receive higher grades in the basic communication course, regardless if the course has an interpersonal communication focus or a public speaking focus (Pearson & Nelson, 1982).

Speculation as to causes for these consistent differences in a variety of communication contexts yields a plethora of hypotheses concerning possible psychological and behavioral antecedents that might prompt such differential response patterns. Some research supports the idea that women receive higher grades because they are better communicators than their male counterparts. Stereotypical feminine traits include warmth and expressiveness (cf. Bem, 1974; Spence, Helmreich, & Stapp, 1975) and these characteristics are reflected

in female behavior (Gillen & Sherman, 1980). Women perceive themselves as more attentive in interpersonal communication (Talley & Richmond, 1980), and they have been repeatedly shown to be more sensitive to the cues that others have offered (cf. Argyle, Salter, Nicholson, Williams, & Burgess, 1970; Rosenthal, Archer, Koivumaki, Di Matteo, & Rogers, 1974).

At the same time, men appear to exhibit some potentially positive communication traits. For instance, men tend to proact while women are more likely to react (Strodtbeck & Mann, 1956). Men talk more frequently and they talk for longer periods of time when they have the floor (Zimmerman & West, 1975; Eakins & Eakins, 1978). Men tend to order, command, interrogate, and declare while women comply, acquiesce, reply, and agree (cf. Eakins & Eakins, 1978). Finally men are generally rated higher on dynamism than are females (Widgery, 1974; Pearson, 1981). In summary, both men and women have communication skills that can be useful within and outside the classroom situation. Women tend to be superior in verbal skills and to be more responsive and sensitive to others while men tend to be more assertive and initiating in their behavior.

An alternative explanation for the differences in grading patterns that are found in the basic course is that women are generally more compliant than men. The classroom setting in which previous research has been conducted might affect the evaluations that occur. Instructors may favor students who are compliant, yielding, and responsive rather than independent, strong, and self-sufficient. At the same time, differing contexts might mitigate against compliance and in favor of assertive, initiating, and domineering communicators.

One other explanation for the different grades that men and women receive may lie in differing responses to speakers, based on their biological differences.

Personality traits, attitudes, and predispositions of the evaluator appear to affect evaluation. Rigid evaluators tend to rate speakers lower than do persons who are non-rigid (Bostrom, 1964). People who are difficult to persuade rate speakers lower than do rathers who are easy to persuade (Bock, 1970). The question of differential criticism was moved from one of sex differences to one of sex role and sexism differences by another researcher (Pearson, 1980b). She found that a predicted interaction between androgyny and the sex of the evaluator yielded only a trend, but that a predicted and confirmed main effect demonstrated that sexist evaluators are more harsh than are nonsexist evaluators. Rigidity, difficulty in persuasibility, and sexism appear to be among the evaluator characteristics that may affect the speech evaluation process. While earlier research suggested that sexism might predict differential grading (Sprague, 1971; Pearson, 1975), the more recent research demonstrates that sexism has weak explanatory power (Pearson, 1980b).

Attempts at explaining differential grading in the basic speech communication classroom have been foiled by methodological difficulties. For instance, the influence of the classroom context has not been examined because all of the studies have been performed in high school or college classrooms (cf. Sprague, 1971, Pearson, 1975, 1980a, 1980b; Bock, Powell, Kitchens, & Flavin, 1976; Hayes, 1977). At the same time, it is difficult to make meaningful comparisons between the successfulness of speakers in the classroom and the success of political speakers, for instance. Too many intervening variables render such comparisons meaningless. Also, studies which have considered sexism as a potential explanation for different grades may be flawed. In these studies, persons recorded their attitudes about women and men on a self-report instrument. The social acceptability of nonsexist responses may have

affected the results that occurred. In other words, responding that women and men should have the same opportunities for any professional or occupational choice that they select may have been salient and viewed as the "correct" response, regardless of the individual's actual attitude. Different results may have occurred if the purpose of the instrument had been more thoroughly masked. Sexism may be viewed as a negative attitude which cannot be measured directly through self-report instruments.

Finally, assessments of students' differential abilities have not been partialled out in past research. Women hay do better than men in college communication courses simply because the distribution of intelligence in the famale college student population is more skewed towards greater potential than is that of the male college population.

Many of these studies share a common focus. Attempts have been made to discover the effects of <u>being thought of</u> or of <u>thinking of ones self</u> as either a male or a female. Much less attention has been given to the question of whether <u>being</u> a biological male or female might cause such differential effects. Women and men may differ in their ability to communicate effectively for some, as yet undiscovered, biological reason. Thei neglect of attention to underlying physiological processes is not unique to this research area. Most communication studies of the past thirty years have chosen to ignore physiological variables and for good reasons. Communication researchers are seldom interested in internal physiological processes of communicators because the level of analysis and theorizing is usually that of behavior, cognition, and emotion, not neurological analysis. Further, even if such an interest arose, the considerable cost and necessary prerequisite research background and training would tend to damper the investigator's intellectual fire.

Finally, a physiological explanation for differences is a much less

appealing hypothesis than one based on socialization. If culture and training create more sensitive, compliant, effective communicators, then men can be trained to be the equal of women. However, if it is the physiology of the communicator that accounts for differences, traditional training procedures would be of little use in equalizing effectiveness.

Such considerations may have influenced much of the previous research in this area, but are not sufficient reasons for failing to consider this alternative physiologically based explanation. Various researchers have demonstrated that male and female brains are organized differently from one another, and have suggested that it is neurological differences that lead to observed sex differences (Goleman, 1978; Harris, 1978). This avenue should be explored, if for no other reason than to establish the relative importance of nurture and nature.

This study represents an initial effort in untangling the question of differential grading in the speech communication classroom. Three potential explanations exist for the differences that have been determined. Women may receive higher scores in the basic speech communication classroom because they generally receive higher grades in their educational endeavors. In order to eliminate this explanation, we will determine students' high school grade point averages and control for them. Women may receive higher scores in the basic course because they have more ability than do men. In order to remove this potential explanation, we will identify students' scores on the A.C.T. and remove the students' determined abilities as measured by this standardized test. Finally, we will attempt to determine if biological sex or psychological sex type offers the best explanation for sex differences that occur in the classroom. In order to examine these variables, two research questions are framed:

Q1: Does biological sex predict final grades in the speech communication classroom when past academic evaluation and demonstrated abilities are removed as predictors?

Q2: Does psychological sex-type predict final grades in the speech communication classroom when past academic evaluation and demonstrated abilities are removed as predictors?

METHOD

Subjects

The subjects in this study were 47 women and 48 men who were randomly selected from the basic undergraduate speech communication course at a small, private midwestern college. This particular university offered a basic course which combined intrapersonal communication, interpersonal communication, small group communication, and public speaking. The course included a theoretical and a performance component. Grades in the course were based on students' performances and written examinations.

Procedure

All of the subjects were enrolled in the same lecture section of the basic course. Each subject completed the Personal Attributes Questionnaire and recorded his or her sex on the instrument. Each subjects' final grade in the basic speech communication course, his or her ACT score, and his or her high school grade point average were obtained from the college records.

Instrumentation

In order to determine the students' psychological sex type, the Personal Attributes Questionnaire (PAQ; Spence, Helmreich, & Stapp, 1974) was administered to the students. The PAQ has items that differentiate between the sexes stereotypically and on self-report. This scale identifies persons who are low or high on masculinity and low or high on femininity. The self-report instrument

has 24 trait descriptions set up on a five-point bipolar scale. The questionnaire includes three separate eight-item scales, labeled Masculinity (M), Femininity (F), and Masculinity-Femininity (M-F). The Masculinity scale includes items males are believed to possess in greater abundance than females, e.g., independence, competitiveness; the Femininity scale includes items that females possess to a greater degree than males, e.g., gentleness, helpfulness; and the Masculinity-Femininity scale depicts characteristics whose social desirability appears to very in the two sexes, e.g., submission is judged to be desirable in females and dominance is desirable in males. Spence, Helmreich, and Stapp report internal consistency, discriminant validity, and reliability (Spence, Helmreich, and Stapp, 1975).

Design

A 2 X 4 analysis of covariance design was utilized. The two independent variables were biological sex with two levels and psychological sex with four levels (masculine individuals who responded that they were high in masculine traits and low in feminine traits; feminine individuals who responded that they were high in feminine traits and low in masculine traits; androgynous individuals who responded that they were high in both masculine and feminine traits; and undifferentiated persons who responded that they were low in both masculine and feminine traits). The dependent measure was the final grade received in the speech communication course. Decause prior academic evaluation was assumed to be predictive of current academic evaluation, the students' high school grade point averages served as one covariate. Similarly, because verbal skills and other measurable aptitudes were believed to be predictive of evaluation in the basic speech communication couse, the students' ACT scores served as a second covariate.

RESULTS

Complete data for 95 subjects was available for analysis in this study. The dependent measure, final grade in the speech communication class, the independent measures, sex and sex type, and the covariates, ACT score and high school GPA, were determined for each of the subjects. In this study, Cronbach's coefficient alpha reveals reliabilities of .64 for the masculinity subscale and .80 for the femininity subscale. Both of the covariates accounted for a significant amount of variance in the students' speech communication grade. The high school grade point average appears to account for more variance ($F = 10.15$, $df = 1$, $p < .002$) than did the ACT score ($F = 3.70$, $df = 1$, $p < .055$). When these sources of variation were removed, biological sex was found to be a significant predictor of grade in the speech communication course ($F = 6.09$, $df = 1$, $p < .015$), but psychological sex, or sex type, was not ($F = .82$, $df = 3$, $p < .487$). Assuming a medium effect side, distribution of the subjects across the cells of the design produced a power of .69 for biological sex, .45 for psychological sex, .45 for their interaction, and .94 for each of the covariates. An interaction between sex and sex type was not found ($F = .72$, $df = 3$, $p < .547$) which allows us to meaningfully interpret the significance of the main effect, sex. Table 1 provides the complete analysis of covariance.

-- INSERT TABLE 1 HERE --

The final speech communication grades given to students classified by sex and sex type are provided in Table 2. The grades are translated into numerical scale in which 12 = A+, 11 = A, 10 = A-, 9 = B+, 8 = B, 7 = B-, etc. Grade inflation, which has been discussed by many educators, is evidenced in this table. More important, for our purposes, is the picture that is provided of differential grading between women and men. Masculine and undifferentiated women receive the highest grades (an average of A-), followed by androgynous women (slightly below

A-), feminine women (slightly above B+), feminine men (B+ average), masculine men (slightly below a B++, undifferentiated men (below a B+), and androgynous men (slightly below a B average).

-- INSERT TABLE 2 HERE --

DISCUSSION

This study demonstrated that male and female students receive significantly different grades in the basic speech communication course. When the predictive value of prior academic evaluation, as measured by the students' high school grade point average, and skills and aptitudes, as measured by the students' ACT scores, are removed, men and women still receive significantly different grades. These differences appear to hold true for biological sex; they were not demonstrated for psychological sex. This study suggests that the higher grades that women receive in the basic speech communication course across a number of communication contexts including interpersonal communication and public speaking, across different orientations in the course including theoretical and skills-oriented courses, do not appear to be a result of the classroom context or the educational setting, nor do they appear to be based on the differences among the students in verbal or other abilities.

Prior studies have demonstrated fairly consistently that men and women receive different grades in the basic speech communication course. The explanation for these differences have included stereotypical characteristics of women and men. Women's stereotypical qualities including compliance, warmth, empathy, and responsibeness contrasted with men's stereotypical characteristics such as independence, assertiveness, outspokenness, and analytical skills suggested that that female characteristics allowed one to communicate more effectively. In this study, psychological sex type which includes these stereotypical characteristics did not yield significant differences among the four sex role groups.

The sample size may have contributed to the lack of significant findings. The power of our test was not sufficient to generate over confidence.

Other methodological problems are possible. The instrument used is subject to falsification by students. Depending on the mind set of the subjects, they may have responded to the PAQ so as to appear more feminine, masculine, or androgenous than is accurate for reasons of social acceptability. While the validity and reliability of the instrument has been tested and found acceptable, further control may be warranted. The subjects do not represent the full range of mental ability. The average ACT score of the subject population was 22. A replication at an open enrollment institution would allow for testing these hypotheses with a more normally distributed population. This would increase the generalizability of the findings. These problems notwithstanding, biological sex appear to be more parsimonious is explaining discrimination in grading.

Men and women receive different grades in the basic speech communication course. Women generally receive higher grades than their male counterparts. The differences in grades between men and women cannot be explained on the basis of prior academic evaluation, on the basis of aptitudes measured by a standardized test, or on the basis of stereotypical masculine and feminine characteristics. The differences may lie in difference in male and female behavior when communicating in the classroom. In other words, women may be more effective oral communicators than men, regardless of the two groups' aptitudes as measured on a written test.

An alternative explanation is that evaluators may respond more favorably to the same communication skills when they are demonstrated by women than when they are demonstrated by men. While these hypothesis might explain the grade differential in communication classes where encoding tasks are predominant, it fails to explain the established superiority of women in communication classes where listening skills are of greater importance. As noted previously, women

receive higher grades than men in theory courses and mass lecture courses as well as in performance courses.

One hypothesis consistent with these research findings is that women listen more effectively than men. This not only would give them an advantage in lecture courses, but also would give them a distinct advantage in performance classes. In the latter context, the documented superior sensitivity of women to cues and their self reports of greater attentiveness would allow them to listen more effectively. Commonsensically, students who hear, understand, and remember instructions will perform better than others who do not listen as effectively.

If, as we believe, biological sex is a predictor of success in communication classes, and if this relationship is due to superior decoding skills, what physiological differences could account for such differential evaluations? Quite possibly it is the previously noted dissimilarity of brain organization between the sexes that prompts such differences. Neurological differences could manifest themselves in both the understanding and retention of aurally received messages. The substantiation of such a causal chain would by unwelcomed by the speech educator for it would provide little hope for the development of remedial methods for equalizing the sexes.

Another possible explanation, if verified, would be more optimistically received. A link has been established between various mental activities and the level of physiological arousal. Of particular interest is the relationship between arousal and retention. Simply put, high levels of arousal result in good long-term memory, while low levels of arousal result in poor long-term memory. Several studies have demonstrated that accuracy and generalizability of this relationship to a number of situations, both controlled and uncontrolled

with differing subject matter and different subject populations (Kleinsmith and Kaplan, 1963; Kleinsmith, et at 1963; Lacey, 1967; Levonian, 1967). Physiological arousal also may be linked to other aspects of the listening process. In order to hear and understand, one needs to expend energy. The greater the effort, the more energy that is expended, hence the greater physiological arousal when listening at optimal effectiveness.

An arousal based explanation of sex differences should have an appeal for the communication researcher and educator for several reasons. First, many extant communication theories posit arousal as a causal or mediating link. Dissonance theory and cognitive consistency theories in general suggest that a form of phenomenological clash produces arousal which leads to attitude or behavior change (Feldman, 1966). Arousal has been suggested as a mediating link between televised violence and aggressive behavior (DeFleur and Ball-Rokeack, 1982). Physiological arousal has been suggested as an intervening variable in much of the research on communication apprehension (McCroskey, 1970; Zimbardo, 1977). The importance of arousal in understanding source credibility also has been explored (Roberts and Steinfatt, 1983). Besides being a somewhat familiar concept to communication theorists, the substantiation of such a hypothesis would provide direction for the communication educator. While little can be done to alter the neurological construction of an individual, a person's arousal level is amenable to change. Even if a female's arousal level were found to be habitually higher than that of a male, men could be trained to raise their arousal level to an optimum level.

We are not aware of any research that directly tests the relationships among sex of listener, physiological arousal, and the varied sub-processes of listening. However, an ex post facto analysis of data gathered for a previous research project does not encourage optimism. While testing the relationship

between source credibility and physiological arousal, with arousal operationalized as tympanic temperature (temperature at the eardrum), Roberts (1979) collected data on the sex of his subjects. Analyzing his results, he co-varied out the effect that the sex of his subjects had on changes in their physiological arousal level. He reports a non-significant relationship between sex of subject and arousal (p .679) and computes a power of .74, assuming a medium effect size, for the test. In another experiment that sought to discover, using multiple regression analysis, the relative importance of possible causal factors to short-term and long-term retention, Roberts, 1979) reports establishing no statistical relationship between sex of subject and either short-term or long-term retention. The power of his analytical procedures, assuming a medium effect size, was .93.

It is unwise to conclude that physiological arousal does not vary due to the sex of the subject. Ex post facto analysis of data collected for other purposes is fraught with danger. Many possible methodological contaminants could have masked the effect that biological sex might have on listening. Such a possible effect might be overpowered by the manipulations present in the experiment. The experimental situation itself might be "arousing" enough so as to mask differential sex effects. Kelley (1971) suggests this possibility is inherent in most experiments concerning listening.

Methodological and pregmatic considerations probably will forestall rapid clarification of any physiological mechanism that might manifest themselves in either the encoding or decoding processes of men and women. Certainly the prudent researcher would first replicate this study to substantiate both the reported significant and non-significant results before probing for physiological antecedents of classroom success.

Speech communication researchers should continue to conduct research which examines sex variables as they relate to communication variables within and

outside the classroom. Though research using psychological sex type has grown in popularity in recent year, increased consideration needs to be given to possible physiological variables that may serve to affect how well men and women communicate. "Nature" should not be overlooked as potentially as powerfulas "nurture." As far as communication research is concerned, covert neurological differences between men and women well may be more important than overt anatomical differences in explaining and predicting successful communication.

REFERENCES

Argyle, M., Salter, V., Nicholson, H., Williams, M., and Burgess, P. The communication of inferior and superior attitudes by verbal and non-verbal signals. British Journal of Social and Clinical Psychology, 1970, 9, 222-231.

Barker, L. L. Irrelevant factors and speech evaluation. Southern Speech Journal, 1966, 32, 10-18

Bem, S. The measurement of psycholcgical androgyny. Journal of Consulting and Clinical Psychology, 1974, 42, 155-162.

Bock, D. G. The effects of persuasivility on leniency, halo, and trait errors in the use of speech rating scales. Speech Teacher, 1970, 19, 196-300.

Bock, D. G., Powell, L. Kitchens, J. T., and Flavin, J. W. The influence of sex differences in speech evaluation: situational and media effects. Communication Education, 1976, 26, 143-153

Cohen, J. Statistical Power analysis for the Behavioral Sciences. New York: Academic Press, 1977.

DeFleur, M. and Ball-Rokeach, S. Theories of Mass Communication. New York Congman, Inc., 1982, 201-208

Eakins, B. W. and Eakins, R. G. Sex Differences in Human Communication. Boston: Houghton Mifflin Company, 1978.

Feldman, S. Motivational Aspects of Attitudinal Elements and Their Place in Cognitive Interaction. Cognitive Consistency. Ed. S. Feldman, New York: Academic Press, 1966, 90-102.

Gillen, B. and Sherman, R. C. Physical attractiveness and sex as determinants of trait attributions. Multivariate Behavioral Research, 1980. 15, 423-437.

Goleman, D. Special abilities of the sexes: Do they begin in the brain? Psychology Today, 1978, 12 (No. 6), 48-59 and 120.

Harris, L. Sex differences in spatial ability: possible environmental, genetic, and neurological factors. Kinsbourne (ed.) Asymmetrical function of the brain. Cambridge: Cambridge University Press, 1978.

Hayes, D. T. Nonintellective predictors of public speaking ability and academic success in a basic college-level speech communication course. Unpublished Ph. D. dissertation, University of Missouri, 1977.

Kelley, C. Listening: Complex of Activities - and a unitary skill? Listening: Readings, (ed. 5) Duke, Metuchen, N. J.: Scarecrow Press, 1971 (Vol. 2), 213-229.

Kleinsmith, L. and Kaplan, S. The interaction of arousal and recall interval in nonsense syllable paired-associated learning. Journal of Experimental Psychology. 1963, 17, 393-397.

Kleinsmith, L., Kaplan, S., and Tarte, R. The relationship of arousal to short- and long-term verbal recall. Canadian Journal of Psychology, 1963, 17, 393-397.

Lacey, J. Somatic response patterning and stress: some revisions of activation theory. Psychology Stress, Appleton, 1967, 34-35.

Levonian, E. Retention of information in relation to arousal during Continuously-presented material. American Educational Research Journal, 1967, 4, 103-116.

McCroskey, J. Measures of Communication-Bound Anxiety, Speech Monographs, 1970, 37, 269-277.

Pearson, J. C. The effects of sex and sexism on the criticism of classroom speeches. Unpublished Ph. D. dissertation, Indiana University, 1975.

Pearson, J. C. Evaluating classroom speeches: An investigation of speaker sex, sexism, and sex role identification. Paper presented at the International Communication Association convention, Minneapolis, Minnesota, May 1981a.

Pearson, J. C. The influence of of the level of instruction and the sex of the teacher on the criticism of classroom speeches. Iowa Journal of Speech Communication, Fall 1980a, 12, 28-34.

Pearson, J. C. The influence of student gender on grading in the basic performance and nonperformance communication courses. Paper presented at the Speech Communication Association convention, Louisville, Kentucky, November, 1982.

Pearson, J. C. An investigation of sex, sexism, and sex role identification and the evaluation of classroom speeches. Paper presented at the Speech Communication Association convention, New York City, New York, November, 1980b.

Pearson, J. C. Sex differences among evaluators and speakers in the basic public speaking course. Paper presented at the Midwest Basic Course Directors Conference, Lincoln, Nebraska, February 1981.

Pearson, J. C. and Helson, P. E. The influence of teacher and student gender on grading in the basic public speaking and nterpersonal communication courses. Paper presented at the Speech Communivation Association convention, Anaheim, California, November 1981.

Roberts, C. The effect of ethos on the retention and reminiscence of information. Dissertation, Temple University, 1979.

Roberts, C. and Steinfatt, T., "Source credibility and physiological arousal: an important variable in the credibility-information retention relationship, Southern Speech, 1983, 48, 340-355.

Rosenthal, R., Archer, D., Koivumaki, J., DiMatteo, M. R., and Rogers, P. Assessing sensitivity to nonverbal communication: The PONS test. Division 8 Newsletter, Division of Personality and Social Psychology of the American Psychological Association, January 1974, 1-3.

Spence, J. T., Helmreich, R. and Stapp, J. Ratings of self and peers on sex-role attributes and their relation to self-esteem and conceptions of masculinity and femininity. Journal of Personality and Social Psychology, 1975, 32, 29-39.

Spence, J. T., Helmreich, R. and Stapp, J. The personal attributes questionnaire: A measure of sex-role stereotypes and masculinity-femininity. JSAS Catalog of Selected Documents in Psychology, 1974. 4, 127.

Sprague, J. A. An investigation of the written critique behavior of college communication instructors. Unpublished Ph. D. dissertation, Purdue University, 1971.

Strodtbeck, F. L. and Mann, R. D. Sex role differentiation in jury deliberations. Sociometry, 1956, 19, 3-11.

Talley, M. A. and Richmond, V. P. The relationship between psychological gender orientation and communicator style. Human Communication Research, 1980, 6, 326-339.

Vigliano, B. M. An investigation of the relationship between the sex of the speaker and the sex of the listener on message comprehension and judgement of speaker credibility. Unpublished Ph. D. dissertation, New York University, 1974.

Widgery, R. N. Sex of receiver and physical attractiveness of source as determinants of initial credibility perception. Western Journal of Speech Communication, 1974, 23, 13-17.

Zimbardo, P., Shyness. Reading, Massachusettes: Addison-Wesley, 1977.

Zimmerman, D. H. and West, C. Sex roles, interruptions, and silences in conversation. Language and Sex: Difference and Dominance, ed. Barrie Thorne and Nancy Henley. Rowley, Massachusettes: Newbury House Publishers, 1975, pp. 105-129.

Table 1: Analysis of Covariance for Sex and Sex Type for Grades in the Basic Speech Communication Course with ACT scores and High School Grade Point Averages Entered as Covariates

Source	SS	df	MS	F	Significance of F
Covariates	101.93	2	50.97	21.94	.000
ACT	8.60	1	8.60	3.70	.055
High School GPA	23.58	1	23.58	10.15	.002
Main Effects	19.33	4	4.83	2.08	.089
Sex	14.16	1	14.16	6.09	.015
Sex Type	5.75	3	1.91	0.82	.487
2-Way Interactions (Sex X Sex Type)	5.01	3	1.67	0.72	.547
Explained	126.27	9	14.03	6.04	.000
Residual	197.45	85	2.32		
Total	323.73	94	3.44		

Table 2: Grades given to Students Classified by Sex and Sex Type

Group	Mean Grade ($\bar{X}$)	Number (n)
Masculine Women	10.00	9
Undifferentiated Women	10.00	1
Androgynous Women	9.83	6
Feminine Women	9.35	31
Feminine Men	9.00	4
Masculine Men	8.96	27
Undifferentiated Men	8.75	8
Androgynous Men	7.67	9

Mean Grade:

10 = A-

9 = B+

8 = B

7 = B-